

State of Utah

DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF AIR QUALITY

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DAQE-616-97

July 9, 1997

Scott Bigler
Westroc Incorporated
127 South 500 East
Suite 300
Salt Lake City, Utah 84102-1959

Dear Mr. Bigler:

Re: Approval Order for Highland Pit Aggregate Plant Production Increase
Utah County, CDS-B, Non-Attainment

The attached document is an Approval Order for the above referenced project.

Future correspondence on this Approval Order should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. Please direct any technical questions you may have on this project to Mr. Tad Anderson. He may be reached at (801) 536-4456.

Sincerely,

Ursula K. Trueman, Executive Secretary
Utah Air Quality Board

UKT:TDA:dn

cc: City/County Health Department of Utah County
Mike Owens, EPA Region VIII
Greg Reece, Westroc

Image Not
Available

STATE OF UTAH

Department of Environmental Quality

Division of Air Quality

APPROVAL ORDER FOR HIGHLAND PIT AGGREGATE PLANT PRODUCTION INCREASE

**Prepared By: Tad Anderson, Engineering Technician
Reviewed By: Tim Blanchard, Engineer**

APPROVAL ORDER NUMBER

DAQE-616-97

Date: July 9, 1997

Source

Westroc Incorporated

**Ursula K. Trueman
Executive Secretary
Utah Air Quality Board
*Abstract***

Westroc, Inc., has proposed to increase the production of their aggregate plant in Highland from the Utah PM₁₀ State Implementation Plan (section IX, Part H.1.b.N). The plant has been limited to 265 tons/hour, 530,000 tons/year, 10 hours/day and 2,000 hours/year by the SIP. They are proposing to increase to the following limits: 600 tons/hour, 1,650,000 tons/year, 16 hours/day and 4,000 hours/year. This facility is located in Utah County which is nonattainment for PM₁₀. The total emissions (SO₂, NO_x, PM₁₀) increase (14.88 tons/year) is such that offsets are not required. The emissions from the plant will have the following emissions: PM₁₀=17.23 tons per year(TPY), SO₂=1.64 TPY, NO_x=17.31 TPY, CO=7.13 TPY, VOC=0.66 TPY. Because Westroc, Inc., will operate equipment subject to New Source Performance Standards (NSPS), this source is subject to Title V of the 1990 Clean Air Act Amendments.

The project has been evaluated and found to be consistent with the requirements of the Utah Air Quality Rules (UAQR) and the Utah Air Conservation Act. A 30-day public comment period was held and all comments received were evaluated. The conditions of this AO reflect any changes to the proposed conditions which resulted from the evaluation of the comments received. This air quality Approval Order (AO) authorizes the project with the following conditions, and failure to comply with any of the conditions may constitute a violation of this order.

General Conditions:

1. This AO applies to the following company:

Facility Location

Highland Aggregate Pit
4600 West 11200 North
Highland City, Utah 84003
(801) 785-5600
(801) 785-7408

Corporate Office Location

Westroc, Inc.
666 West 220 So. P.O. Box 368
Pleasant Grove, Utah 84062
(801) 785-5600
(801) 785-7408

The equipment listed below in this AO shall be operated at the following location:

PLANT LOCATION:

Universal Transverse Mercator (UTM) Coordinate System:
4,476.5 kilometers Northing; 435.2 kilometers Easting; Zone 12

2. Definitions of terms, abbreviations, and references used in this AO conform to those used in the Utah Administrative Code Rule 307 (UAC R307), and Series 40 of the Code of Federal Regulations (40 CFR). These definitions take precedence unless specifically defined otherwise herein.
3. Westroc, Inc. shall operate the Highland aggregate pit and shall install and operate the equipment given in condition #6 according to the terms and conditions of this AO as requested in the NOI dated April 4, 1997.
4. Regardless of any inconsistency between conditions of this AO and Section IX, Part H.1.b.N West Rock, Highland Aggregate Pit of Section IX, Part H (Emission Limitations) of the SIP, this AO shall take precedence as provided by R307-1-3.2.4, UAC. The language of Section IX, Part H, 1.b.N has been incorporated in this AO.

5. A copy of this AO shall be posted on site. The AO shall be available to the employees who operate the air emission producing equipment. These employees shall receive proper instruction as to their responsibilities in operating the equipment according to all of the relevant conditions listed below.
6. The approved installations shall consist of the following equipment or equivalent*:
 - A. 3-Deck Horizontal Wet Screen

Manufacture:	El Jay*
Size:	6 feet x 16 feet
Serial #:	3410684
Year:	1987
Eq #:	CR402
 - B. Sand Screw

Manufacturer:	Eagle*
Size:	44 inches x 32 feet
Serial #:	12429
Year:	1987
Eq #:	CR406
 - C. Portable Double Screening Plant

Screens(2):	El Jay*
Size:	5 feet x 16 feet
Year:	1989
Eq #:	CR427
 - D. Horizontal 2 Deck Screen

Manufacturer:	El Jay*
Size:	4 feet x 8 feet
Serial #:	495
Year:	1988
Eq #:	CR429
 - E. Sand Screen

Manufacturer:	Simco*
Size:	4 feet x 8 feet
Year:	1990
Eq #:	CR438
 - F. Sand Screw

Size: 18 inches
Year: 1991
Eq #: CR440

G. Crusher

Manufacturer: Nordberg*
Power rating: 300 horsepower
Year: 1993
Eq #: CR441

H. Dewatering Bucket Screw

Manufacturer: Switchwey*
Year: 1995
Eq #: CR452

I. Sand Screw

Manufacturer: Armadillo*
Size: 36 inches
Year: 1996
Eq #: CR454

J. Triple Deck, Horizontal Vibration Screen

Manufacturer: Cedarapids/El Jay*
Size: 6 feet x 16 feet
Serial #: 45371-E28
Year: 1995
Eq #: CR455

K. Other associated equipment including loaders, dozers, graders, etc

* Equivalency shall be determined by the Executive Secretary.

Any future changes or modifications to the equipment and processes approved by this AO that could effect the emissions covered by this AO must be approved in accordance with R307-1-3.1.1, UAC.

Limitations and Tests Procedures

7. Visible emissions from the following emission points shall not exceed the following values:

- A. All crushers - 15% opacity
- B. All screens - 10% opacity
- C. All conveyor transfer points - 10% opacity
- D. All diesel engines - 20% opacity
- E. Conveyor drop points - 20% opacity
- F. All other points - 20% opacity

Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9. Visible emissions from mobile sources and intermittent sources shall use procedures similar to Method 9, but the requirement for observations to be made at 15-second intervals over a six-minute period shall not apply. Any time interval with no visible emissions shall not be included.

8. Visible emissions from any stationary point or fugitive emission source associated with the source or with the control facilities shall not exceed 20% opacity. Opacity observations of emissions from stationary sources shall be conducted in accordance with 40 CFR 60, Appendix A, Method 9. Visible emissions from mobile sources and intermittent sources shall use procedures similar to Method 9, but the requirement for observations to be made at 15-second intervals over a six-minute period shall not apply. Any time interval with no visible emissions shall not be included.

9. The following production limits shall not be exceeded without prior approval in accordance with R307-1-3.1, UAC:

- A. 1,650,000 tons per rolling 12-month period
- B. 600 tons per hour
- C. 16 hours per day
- D. 4,000 hours per rolling 12-month period

Compliance with the annual limitations shall be determined on a rolling 12-month total. The owner/operator shall calculate a new 12-month total based on the twentieth day of each month using data from the previous 12 months. Records of production shall be kept for all periods when the plant is in operation. Records of production, including rolling 12-month totals shall be made available to the Executive Secretary or Executive Secretary's representative upon request and shall include a period of two years ending with the date of the request. Production shall be determined by record keeping of the production pit from weight scales. The records shall be kept on a daily basis. Hours of operation shall be determined by supervisor monitoring and maintaining of an operations log.

Roads and Fugitive Dust

10. All unpaved roads and other unpaved operational areas that are used by mobile equipment shall be water sprayed and/or chemically treated to control fugitive dust. The application of water or chemical treatment shall be used. Treatment shall be of sufficient frequency and quantity to maintain the surface material in a damp/moist condition. The opacity shall not

exceed 20% during all times the areas are in use. If chemical treatment is to be used, the plan must be approved by the Executive Secretary. Records of water and/or chemical treatment shall be kept for all periods when the plant is in operation. The records shall include the following items:

- A. Date
- B. Number of treatments made, dilution ratio, and quantity
- C. Rainfall received, if any, and approximate amount
- D. Time of day treatments were made

Records of treatment shall be made available to the Executive Secretary upon request and shall include a period of two years ending with the date of the request.

11. The haul road limitations shall be:

- A. 1 mile in length
- B. 12 miles per hour

These limitations shall not be exceeded without prior approval in accordance with R307-1-3.1, UAC. The haul road speed shall be posted.

12. Control of disturbed or stripped areas is required at all times (24 hours per day every day) for the duration of the project/operation until the area is reclaimed. Records of treatment or and/or reclamation shall be kept for all periods when the plant is in operation.
13. Visible fugitive dust emissions from haul-road traffic and mobile equipment in operational areas shall not exceed 20% opacity. Visible emissions determinations for traffic sources shall use procedures similar to Method 9. The normal requirement for observations to be made at 15-second intervals over a six-minute period, however, shall not apply. Six points, distributed along the length of the haul road or in the operational area, shall be chosen by the Executive Secretary or the Executive Secretary's representative. An opacity reading shall be made at each point when a vehicle passes the selected points. Opacity readings shall be made one-half the vehicle length or greater behind the vehicle and at approximately one-half the height of the vehicle or greater. The accumulated six readings shall be averaged for the compliance value.
14. The moisture content of the material shall be maintained at a minimum of 4.0% by weight silt. The moisture content shall be tested if directed by the Executive Secretary using the appropriate American Society of Testing and Methods (ASTM) method.
15. The storage piles shall be watered to minimize generation of fugitive dusts as dry conditions warrant or as determined necessary by the Executive Secretary. Records of water and/or chemical treatment shall be kept for all periods when the plant is in operation.
16. The silt content of the haul roads shall not exceed 4.8% by weight without prior approval in accordance with R307-1-3.1, UAC. The silt content shall be determined if directed by the Executive Secretary using the appropriate ASTM method. The silt content is defined as all material passing a #200 U.S. Standard Sieve.

Fuels

17. The owner/operator shall use only #2 or better fuel oil as a primary fuel. If any other fuel is to be used, an AO shall be required in accordance with R307-1-3.1, UAC.
18. The sulfur content of any fuel oil or diesel burned shall not exceed 0.05 percent sulfur by weight. Sulfur content shall be decided by ASTM Method D-4294-89, or approved equivalent. The sulfur content shall be tested if directed by the Executive Secretary.

Federal Limitations and Requirements

19. In addition to the requirements of this AO, all provisions of 40 CFR 60, New Source Performance Standards (NSPS)¹ Subparts A and OOO, 40 CFR 60.1 to 60.18 and 40 CFR 60.670 to 60.676 (Standards of Performance for Nonmetallic Mineral Processing Plants) apply to this installation. A copy of the latest 40 CFR 60 Subparts A (section 60.8) and Subparts OOO(section 60.670-676), dated July 1, 1993, is attached to this document as Appendix B. However, to be in compliance, this facility must operate in accordance with the most current version of 40 CFR 60 applicable to this plant.

Records & Miscellaneous

20. All installations and facilities authorized by this AO shall be adequately and properly maintained. Maintenance records shall be maintained while the plant is in operation. All pollution control vendor recommended equipment shall be installed, maintained, and operated. Instructions from the vendor or established maintenance practices that maximize pollution control shall be used. All necessary equipment control and operating devices, such as pressure gauges, amp meters, volt meters, flow rate indicators, temperature gauges, CEMS, etc., shall be installed and operated properly and easily accessible to compliance inspectors. A copy of all manufacturers' operating instructions for pollution control equipment and pollution emitting equipment shall be kept on site. These instructions shall be available to all employees who operate the equipment and shall be made available to compliance inspectors upon their request.
21. The owner/operator shall comply with R307-1-3.5, UAC. This rule addresses emission inventory reporting requirements.
22. The owner/operator shall comply with R307-1-4.7, UAC. This rule addresses unavoidable breakdown reporting requirements. Any breakdown lasting longer than two hours shall be reported to the Executive Secretary within three hours of the breakdown if reasonable, but in no case longer than 18 hours after the beginning of the breakdown. During times other than normal office hours, breakdowns for any period longer than two hours shall be initially reported to the Environmental Health Emergency Response Coordinator. Within seven calendar days of the beginning of any breakdown lasting longer than two hours, a written report shall be submitted to the Executive Secretary. The owner/operator shall

¹ NSPS = New Source Performance Standards.

calculate/estimate the excess emissions (amount above AO limits) whenever a breakdown occurs. The total of excess emissions per calendar year shall be reported to the Executive Secretary with the inventory submittal, as directed by the Executive Secretary.

23. All records referenced in this AO or in applicable NSPS or NESHAP, which are required to be kept by the owner/operator, shall be made available to the Executive Secretary or Executive Secretary's representative upon request and shall include a period of two years ending with the date of the request. All records shall be kept for a period of two years (used oil records are to be kept for a period of three years). Examples of records to be kept at this source shall include the following as applicable:

- | | | |
|----|---------------------------|-----------------------|
| A. | Production rate | (Condition number 9) |
| B. | Maintenance records | (Condition number 20) |
| C. | Upset, breakdown episodes | (Condition number 22) |
| D. | Hours of operation | (Condition number 9) |
| E. | Fugitive emission control | (Condition number 10) |
| F. | Emissions Inventory | (Condition number 21) |

Any future modifications to the equipment approved by this order must also be approved in accordance with R307-1-3.1.1, UAC.

The Executive Secretary shall be notified in writing if the company is sold or changes its name. The notification shall be submitted within 30 days of such action.

This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including the Utah Air Conservation Rules.

Annual emissions for the Highland Aggregate Plant are currently calculated at the following values:

	<u>Pollutant</u>	<u>Tons/yr</u>
A.	TSP	37.20
B.	PM ₁₀	17.23
C.	SO ₂	1.64
D.	NO _x	17.31
E.	CO	7.13
F.	VOC	1.24

These calculations are for the purposes of determining the applicability of Prevention of Significant Deterioration, nonattainment area, and Title V source requirements of the UAC R307.

In accordance with the requirements of Title V of the 1990 Clean Air Act, the following pollutants may be subject to an operating permit fee. Emissions of the following pollutants from all sources, including pre-November 29, 1969 sources, may be subject to the operating permit fee. Both the fees rate and the class of pollutants are subject to change by State, the federal agencies, or both.

	<u>Pollutant</u>	<u>Tons/yr</u>
A.	PM ₁₀	17.23
B.	SO ₂	1.64
C.	NO _x	17.31
D.	VOC	1.24

Approved By:

Ursula K. Trueman, Executive Secretary
Utah Air Quality Board